



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,421	01/11/2006	Antonius Adrianus Kalker	NL 030808	8966
24737 7590 04/05/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
POOMORE, TRAVIS D				
ART UNIT		PAPER NUMBER		
2436				
MAIL DATE		DELIVERY MODE		
04/05/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,421

Applicant(s)

KALKER ET AL.

Examiner

Travis Pogmore

Art Unit

2436

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 5-8 and 14 is/are allowed.
- 6) ☒ Claim(s) 9, 12 and 15 is/are rejected.
- 7) ☒ Claim(s) 10, 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the request for reconsideration filed March 4, 2010.
2. Claims 1-3 and 5-15 are currently pending. Claims 1-3, 5-9 and 12-15 have been previously presented.
3. Applicant's arguments, with regards to claims 9, 12 and 15, filed March 4, 2010 have been fully considered but they are not persuasive.

Allowable Subject Matter

4. Claims 1-3, 5-8 and 14 are allowable.
5. The following is an examiner's statement of reasons for allowability:
6. Depovere teaches embedding a watermark being, the embedding being controlled by a watermark secret.
7. Conwell teaches calculating and storing a digital fingerprint.
8. Claim 1 recites deriving a watermark secret from an identifier. This limitation in combination with the other recited limitations of claim 1 is not taught or suggested by the prior art of record. Claim 14 recites equivalent limitations.

Examiner Notes

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

10. Claims 10-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections – 35 USC § 102

11. Claims 9 and 15 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Pub. No. US 2002/0154144 A1 (hereinafter "Lofgren").

Lofgren teaches a method of detecting a digital watermark in an information signal; the method comprising

providing a plurality of digital reference fingerprints each calculated from a respective reference information signal, where each digital fingerprint is associated with a corresponding watermark secret (page 4, paragraphs 47-49, each image (i.e., respective reference information signal) has a specific fingerprint (i.e., digital reference fingerprint) which is associated with the image family which is associated with the watermark identifier (i.e., watermark secret) during the population of the image database);

calculating a digital fingerprint from the information signal (page 4, paragraph 49, "calculating a hash of the image");

determining a matching digital fingerprint from the plurality of digital reference fingerprints as corresponding to the calculated digital fingerprint (page 4, paragraph 49,

"the calculated hash is used to match or otherwise identify an image from the hash(es) associated with the image family");

detecting whether a digital watermark according to the watermark secret associated with the matching digital fingerprint is present in the information signal (page 4, paragraph 49, "extracting a digital watermark identifier").

Claim Rejections – 35 USC § 103

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lofgren in view of U.S. Patent Application Pub. No. US 2002/002800 A1 (hereinafter "Conwell").

As to claim 12, Lofgren teaches the method according to claim 9, but does not specifically teach wherein the information signal comprises an encoded information signal; and calculating the digital fingerprint comprises decoding the encoded information signal, and calculating the fingerprint from the decoded information signal.

However, Conwell teaches wherein the information signal comprises an encoded information signal; and calculating the digital fingerprint comprises decoding the encoded information signal, and calculating the fingerprint from the decoded information signal is well known and expected in the art (page 1, column 1, paragraph 11 to column 2, paragraph 12 and paragraphs 19-20; under the broadest reasonable interpretation of an encoded information signal it is inherent that any information signal that is digital (and thus processable by computer as in paragraphs 11-12) is encoded (i.e. in bits which are specifically determined by bit depth and sample rate); it is also inherent that being able being able to acoustically compare songs sampled at differed bit rates (and

thus the bits would not be identical) as in paragraphs 19-20 requires that the songs be decoded to some other form before calculating a fingerprint).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Lofgren to calculate fingerprints as in Conwell because this would allow for a variety of modifications (e.g., a certain degree of downsampling) to be made to a signal without generating a new "derivative" object/fingerprint (Lofgren, page 3, paragraphs 35-36).

Response to Arguments

13. Applicant's arguments, with regards to claims 9, 12 and 15, filed March 4, 2010 have been fully considered but they are not persuasive.

14. On pages 6-7 of the Applicant's Response, Applicant argues that "Lofgren does not teach each and every element of the Applicant's claim 9". Applicant then notes that "it is not indicated what element(s) in Lofgren allegedly correspond to Applicants' claimed digital reference fingerprints" and "it is not indicated how and what is calculated in Lofgren", and finally, "[s]ince the recited digital reference fingerprints are not specifically identified in Lofgren by the examiner, it follows that the above feature of the present invention is not found in the cited reference."

15. As requested, the Examiner has pointed out in greater detail the correspondence between Lofgren and the Applicants' claimed elements where requested.

To follow through the correspondence step by step: each image corresponds to a reference information signal; from each image a hash/fingerprint is calculated which corresponds to the plurality of digital reference fingerprints; each fingerprint is

associated with the image family which is "defined (or identified) by" (i.e. associated with) a watermark identifier (i.e., watermark secret). These hashes of the images correspond directly to the claimed digital fingerprints, and are calculated by hashing the image (i.e. information signal). Lofgren further explicitly states "the calculated hash is used to match ... an image from the hash(es)" which corresponds to the limitation "determining a matching digital fingerprint".

As the specifics of the correspondence between the reference and the claim limitations have now been pointed out, it is hoped that this correspondence is also now clear to the Applicant.

16. On page 7 of the Applicant's Response, Applicant argues with regards to claim 12 that because "[t]he examiner relies on Conwell only for the additional feature of claim 12 ... it is effectively conceded in the Office Action that Conwell fails to cure the deficiencies in Lofgren".

17. The Examiner respectfully disagrees with Applicant's arguments, because nothing of the sort is conceded, effectively or explicitly. As Lofgren teaches all elements of claim 9, no secondary reference was used in the rejection thereof. It should be clear that this in no way implies that another reference (be it Conwell or any other) does not teach the same elements. All that this usage of Conwell implies is that which is explicitly stated in the above rejection: "Lofgren ... does not specifically teach [the additional features of claim 12]".

18. Therefore, in view of the above reasons, Examiner maintains rejections.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis Pogmore whose telephone number is (571)270-7313. The examiner can normally be reached on Monday through Thursday between 8:30 a.m. and 4:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nasser Moazzami/
Supervisory Patent Examiner, Art Unit 2436

/Travis Pogmore/
Examiner, Art Unit 2436